The 16th JMRC symposium, which was organized jointly with the 8th Meeting of France – New EU members, was held from 5 to 7 June 2008 at the premises of the Polish Academy of Arts and Sciences (PAU) in Kraków. This joint meeting entitled “New Frontiers in Cardiovascular Research” combined the traditions of the series of France-New EU Members meetings, which take place every two years in different locations in Europe (Prague 1994, Smolenice 1996, Strasbourg 1998, Mariánské Lázně 2000, Smolenice 2002, Montpellier 2004, Debrecen 2006) and of the annual JMRC symposia held in Kraków since 1993 (www.jmrc.org.pl). The programme focused on selected topics within the field of cardiovascular biology and medicine, such as endothelial inflammation and vascular dysfunction, cardiac dysfunction and heart failure, the role of mitochondrial dysfunction in cardiovascular diseases, and others. The symposium featured 21 lectures of invited speakers, 12 short oral presentations selected from submitted abstracts, and over 100 posters. We had the pleasure of hosting around 200 participants from various European countries and the USA.

The present special issue of the *Pharmacological Reports* contains 19 papers which, either as reviews or original contributions, discuss the topics of the lectures delivered during the symposium. The articles follow the order of the symposium sessions and speakers: the opening lecture (Bohuslav Ostadal); the session on endothelial inflammation (François Mach, Charlotte Lawson, Andreas Daiber, Ramaroson Andriantsitohaina, Claude Delcayre, Francisco Francisco Perez-Vizcaino, Stefan Chłopicki, Zsolt Bagi, Ulf Simonsen, Olga Pechánová); the session on mitochondria and cardiovascular pathology (Fabio di Lisa, Renée Venturra-Clapier); the session on myocardial contractility – from normal to failure (Attila Borbély, Frank Lezoualch, Tomáš Šimůnek, Sean M. Davidson), and the closing lecture (Randy Sprague).

I am convinced that this special issue of the *Pharmacological Reports*, together with three similar issues of the *Pharmacological Reports* published previously (*Pharmacological Reports*, 2005, 57, Suppl; 2006, 58, Suppl; 2008, 60, no. 1), is a rich source of original papers and excellent reviews, presenting knowledge on the various mechanisms, targets and approaches to be further exploited in the pharmacology of the vascular wall and the cardiovascular system.

Finally, on behalf of Ramaroson Andriantsitohaina, the co-chair of the conference, and the scientific and organizing committees, I would like to express my gratitude to all the speakers and participants of our meeting, who contributed to the success of our symposium in 2008 in Kraków.

*Stefan Chłopicki*  
*Guest Editor*  
*President of the JMRC Foundation Council*

Kraków, December 2008